

National Program for Interstate Milk Shipments

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As a background for the views of the Public Health Service on a national program for interstate milk shipments, we would like first to describe briefly the responsibilities of our organization in the broad field of milk sanitation. Then we shall outline for you the major problems, as we see them, which necessitate the establishment of a cooperative program for the certification of interstate shippers of milk.

The Public Health Service has a long-standing and dual interest in milk and milk products. These products occupy a unique position in human nutrition and they play an important role in the transmission of infectious diseases to man.

The nutritional importance of milk and milk products is one of the foundation stones upon which the dairy industry has been built. Adequate amounts of milk and milk products are not only essential to the maintenance of good

health in all age groups, but in these days of high costs of living, these products are still among the best buys in terms of food value per dollar of expenditure. Thus, the Public Health Service, along with other health agencies, has long advocated—and continues to advocate—the increased consumption of milk and milk products.

Early PHS Investigations

To make possible the increasing consumption of milk in our growing urban population, the Public Health Service has also been concerned with the safety of market milk. The interstate quarantine responsibilities of the Service as early as 1893 directed our attention to the role of milk in the transmission of infectious diseases. Early bacteriological investigations made by the Service led to the establishment in 1923 of an Office of Milk Investigations, which had the responsibility of investigating milk-borne outbreaks of disease, recommending methods for their prevention and control, and establishing standards for the sanitary quality of milk and milk products served aboard trains and ships operating in interstate commerce.

These investigations, as well as more recent studies, were conducted in cooperation with the dairy industry and State and local health agencies. One result of these scientific studies was the conclusion that a safe milk supply for the public required the elimination of disease in dairy herds, the application of sanitation techniques to milk production, and the effective pasteurization of milk and milk products.

The first World War gave significant impetus to improved sanitation in this country. At that time, we experienced our first crisis in public

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This statement was read by Mr. Hanson in a symposium before the Fifth Annual Meeting of the Dairy Products Improvement Institute, Inc., in New York, January 17, 1952. At the same time, "The Purpose, Plans, and Progress of the National Conference on Interstate Milk Shipments" were discussed by J. L. Rowland, M.P.H., chairman of the conference and director of the bureau of food and drugs of the Division of Health of Missouri; and C. J. Babcock of the Production and Marketing Administration of the Department of Agriculture spoke on "Standards for Grades of Milk and Cream for Manufacturing Purposes."

health with respect to increased mobility of population and concentration of military personnel in areas lacking modern methods of sanitation and milk control. A review of milk control regulations then in force revealed that many States and municipalities had no such regulations. Among those that had adopted milk control laws and regulations, there was a lack of uniformity in approach and standards which negated the possibility of a safe and acceptable milk supply for the Nation as a whole.

Cooperative Development of Standards

These findings clearly indicated the need for practical and uniform regulations, based upon sanitary science and veterinary medicine, which could be adopted and enforced throughout the Nation. The Public Health Service therefore drew together a group of authorities in the field—whose institutional connections included State and local health agencies, the dairy industry, universities, and State departments of agriculture—to assist in the development of a municipal ordinance for milk sanitation. In 1932 a National Milk Sanitation Advisory Board was appointed and the Public Health Service has maintained such an advisory body to the present day, with the addition of experts in other fields of food sanitation.

With the advice of its consultants and with the active cooperation of the States, cities, and the dairy industry, the Public Health Service developed in 1923 a standard ordinance for voluntary adoption. Since that time, there have been nine revisions of the Milk Ordinance and Code Recommended by the United States Public Health Service, including that of 1952, which will be published in a few months.

Each revision of the recommended ordinance and code has been accomplished with the active cooperation of our advisory board and representatives of the groups who aided in the original development. We emphasize the Public Health Service's method of cooperative action because there is a tendency nowadays to assume that any action by any Federal agency is designed to bring about Federal control and regulation. The long-established policy and practice of the Public Health Service has been to bring about the solution of broad problems af-

fecting the Nation's health preferably by the collection of scientific data, consultation, technical aid, and cooperation, rather than by undertaking the enforcement of regulations ourselves.

We would like to add that this has been our policy and practice even when Congressional legislation has given us clear regulatory and enforcement authority—as in the case of the control of biological products and of interstate quarantine. Up to the present time we have found this approach both economical and effective. The public, as well as the Federal Government, the industries involved, and the State agencies, have been spared the costs and delay of regulatory hearings and court action. And in each instance, there has been protection for the public and unabated progress in the development, distribution, and sale of safe and potent biological products and in the sanitary quality of foods and water served on interstate carriers.

Sanitary Control of Market Milk

The Milk Ordinance and Code Recommended by the Public Health Service was prepared for voluntary adoption by local governments. What has been the effect of this proposal upon the sanitary quality of market milk consumed in the United States?

At the present time, the ordinance and code has been adopted by more than 1,500 municipalities and 387 counties in 38 States and Alaska. It is also the basis of milk sanitation laws or regulations in 34 States, Alaska, and Hawaii. Eleven of these States and the two Territories enforce the code state-wide. Included in this milk sanitation program are 55 cities with populations of over 100,000, and 38 with populations of 50,000 to 100,000. According to data from the 1950 United States Census, more than 60,000,000 persons are thus protected by the milk ordinance and code which was first developed jointly by the dairy and related industries and Federal, State, and local health agencies nearly 30 years ago.

In 1938, milk-borne outbreaks constituted one-fourth of all disease outbreaks due to infected foods and polluted water. The most recent data show that milk and milk products are

responsible for only 3½ percent of such reported outbreaks. Today, more than 90 percent of the market milk consumed in the United States is pasteurized—a phenomenal development over the past 30 years.

Public health agencies do not claim that the long-term cooperative program in milk sanitation has been the sole factor in the improvement of the Nation's milk supply. But there is good evidence that this joint effort of the health agencies and the industries has been and is a major and decisive factor. The reduction in the incidence of milk-borne diseases and in the mortality from these causes over the past 30 years has been an outstanding accomplishment. Many groups have contributed to this achievement. Public health and agricultural agencies, the dairy and related industries, the medical and veterinary professions, educational institutions, and an enlightened public all share the credit.

Constant Supervision Needed

Despite the progress that has been made, we must continue our efforts to protect our market milk supplies and milk products. Constant vigilance is as essential in this area as in the maintenance of safe water supplies. The fact which we must keep ever in the front of our thinking, our planning, and our operations is that milk is an efficient medium for the growth of pathological organisms. A safe milk supply demands effective sanitation techniques at every stage of production, processing, and delivery.

This is not to say that effective sanitation today is identical in every respect with that of 30 years ago. The results of scientific research and technology have made available new types of equipment and less burdensome methods. The Public Health Service, the related industries, and many State and local agencies have recognized and stimulated technological progress in this field. The numerous revisions of the ordinance and code testify to this determination on our part and that of our advisers to keep pace with new developments and thus to give the public the benefits of scientific progress.

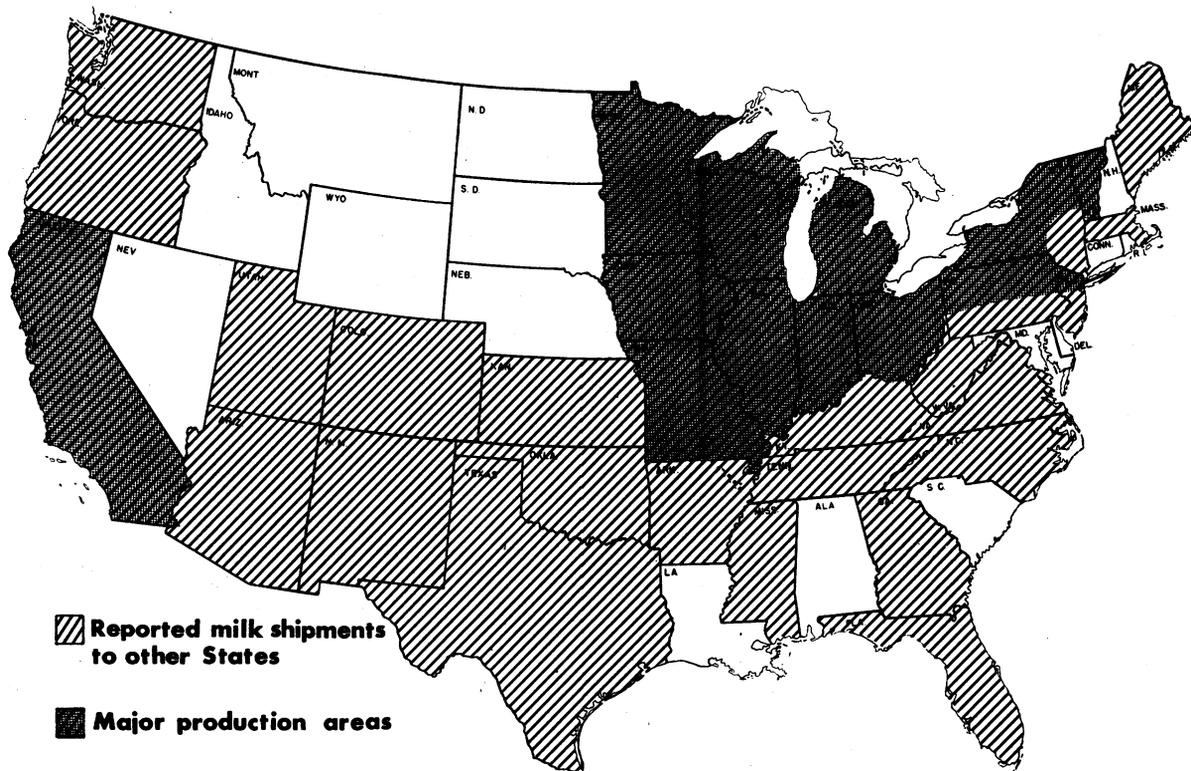
It is true that not all of the old problems in milk sanitation have been solved. Indeed, new ones are constantly coming to light. The control of brucellosis is still a major problem. The recent demonstration that Q fever organisms exist in some dairy herds requires that intensive research be directed to the mode of transmission of this disease to man. New methods for processing, packaging, and marketing milk and milk products are constantly being introduced. If these methods are to be widely adopted, both consumers and producers need the assurance of careful scientific studies upon which to base the needed safeguards.

Use of Chemicals and Antibiotics

There is a wide gap between our precise knowledge and the safe use of chemicals as preservatives, or of antibiotics in the treatment of dairy herds, or of insecticides in the eradication of disease-carrying flies, mosquitoes, and so on. In these situations, medical and related research has a big job to do to determine the cumulative effects of small amounts of such substances in milk as consumed by the public.

We should like to point out, however, that all of the agencies and industries involved are faced with a dilemma. Failure to use the necessary amounts of antibiotics and insecticides would certainly expose the public to serious risks of infection with the dysenteries, streptococcal and staphylococcal infections, and other dangerous diseases which may be transmitted by the milk of infected herds or by insects. On the other hand, some health authorities have raised the question of possible toxic reactions to small amounts of DDT in milk, for example; or of resistance in children to antibiotics through the ingestion of small amounts in the milk of animals treated with such drugs.

Man's environment has always presented risks to his health and safety. The question today is whether the use of chemicals—both in the war against communicable disease and in the production and distribution of a safe, ample, varied food supply for every part of the country—presents serious risks to public health; or whether uncontrolled sources of infection or reductions in needed food supplies present more serious risks than the use of chemicals.



The Public Health Service is aware of the dilemma. Through our laboratory and field research centers, we are now developing an intensive research program directed to studies of the chemical environment as it affects human health. Many of the problems to be investigated concern the dairy industry and the official agencies, as well as the public. Our view is that scientific research can provide the answers which will make possible the application of valuable chemical techniques without significant risk and with great benefit to the public.

The Public Health Service works—and always has worked—on the principle that new techniques recommended to the public for better health or for greater health protection must be not only effective but safe. The basis of assurance is thorough, multidisciplinary research in pertinent experimental, clinical, and epidemiological fields. We consider that such investigations are part of our general responsibility for the public health.

Even so, we are bound to admit that no method or agent used in medical and public health practice is completely free of risk. Exceptions to demonstrated findings of safety and

effectiveness are bound to occur. Both private physicians and health agencies are obliged to take calculated risks in discharging their responsibilities to society. Their decisions must be based upon scientific determinations that the risk is minimal and that it is outweighed by demonstrated benefit to the individual patient or the public.

Interstate Milk Shipments

The technical problems in milk sanitation which we have been discussing are accompanied by another larger problem, namely, the interstate shipment of milk and milk products. A practical solution for it has been proposed.

Until comparatively recent years, the volume of market milk and cream shipped in interstate commerce was small. It created no special problems except for large metropolitan centers such as New York. The public demand for these products, however, has exceeded the local supply in many areas, and throughout the past 10 years the needs of the armed forces also have increased markedly.

Interstate milk shipments today indicate that the problem is national in scope and volume.

of difficulty in the interstate shipment of milk. In the first place, the regulations of the shipping areas may differ widely from those of the receiving municipalities. Second, it is not uncommon for numerous municipalities to purchase milk from the same interstate shipper. As a result, multiple inspections of the same supply by sanitarians from many different jurisdictions impose an unwarranted burden upon producers. Producers resent these confusing and troublesome practices and they are interested in finding a way to eliminate them.

It is easy to see why. The dairy farmer—the dairy industry in fact—knows that the requirements essential to protect the consumer against disease are practically the same regardless of the geographic area involved. Hence, he cannot understand why the requirements of different local jurisdictions differ or contradict each other. He cannot understand why health authorities of one jurisdiction should not accept the results of inspections by health authorities of another.

The Public Health Service holds the same view as to the desirability of uniform regulations and reciprocity in the inspection of milk. We have long felt that the first step toward a successful interstate milk shipment program must be acceptance by all concerned of common criteria for the evaluation of the sanitary quality of a milk supply.

There is no question that a State or community has the right to inspect at the source the milk and milk products it is to receive. But it is our view that some less cumbersome, less expensive, and more efficient method can be developed which will meet universal approval and will benefit all interests. Multiple inspections are expensive for both shipping and receiving areas and sometimes absorb tax funds which are urgently needed for other health purposes. The maintenance of multiple standards by milk producers may also require unnecessary expenditures which increase the cost of milk to the consumer.

It is doubtful also that infrequent inspections by sanitarians from distant areas provide more than superficial protection, since such inspections are not followed by routine control measures. In this connection, the health authorities of some shipping communities do not assume

responsibility for the sanitary supervision and control of surplus milk produced under their jurisdiction on the ground that it is not for local consumption.

Because of the expense involved, many importing States and municipalities cannot afford to send their own men to the State of origin. The alternatives, as the officials in the importing areas see it, have been to accept milk of unknown or questionable sanitary quality, or to refuse permission to import milk even though it is needed to provide adequate supplies for their communities. Some authorities have refused to accept any milk from beyond the limits of their own routine inspection, although during periods of extreme shortage they may permit the importation of milk not subject to any sanitary control.

Health Rules as Trade Barriers

Obviously, there are important economic as well as health factors involved in the shipment of milk from surplus to deficient areas. Without attempting to discuss the economics in detail, we do wish to emphasize that the invocation of health requirements as a means of solving problems of trade and commerce is unwarranted. This practice has been increasing in recent years, and has given rise to serious interference with interstate and even intrastate commerce. It has not afforded greater health protection and has actually made increased consumption of milk and milk products more difficult for the lower-income families in some areas.

The technique most commonly used is to insert into local milk sanitation regulations restrictive requirements that can be met only by local producers and processors. Most such restrictions have little or no public health significance, and are even difficult to guise as public health requirements.

As an example, some municipalities forbid the sale of any milk that is not pasteurized within so many miles of the center of the community. The assumption is that all milk pasteurized beyond that point is not safe to drink, since the city does not wish to inspect it. The purpose of these arbitrary requirements is, of course, to exclude all outside milk re-

ardless of its wholesomeness, thus preventing competition.

The growth of these trade barriers has been so rapid, and their effect on interstate milk shipments so great, that in 1950 the United States Supreme Court and a committee of the United States Senate both dealt with the matter.

Supreme Court Ruling

The Supreme Court, during its October 1950 term, ruled that a city could not adopt discriminating health regulations which act as trade barriers against interstate commerce. Such action, the Court stated, could not be taken, even to protect the public health and safety, providing that reasonable nondiscriminatory alternatives were available to afford such protection. The Court then pointed out that two reasonable alternatives exist. A city may rely upon its own officials for inspection of distant milk sources; or it may rely on inspections made by health authorities at the source, as provided in section 11 of the Milk Ordinance and Code Recommended by the Public Health Service. This section establishes reciprocity as a basis for acceptance of outside milk, and defines the criteria which must be met.

The Senate Committee on Agriculture and Forestry, through a subcommittee, held public hearings to determine the cause and effect of restrictive regulations and reported, August 1, 1951, that the movement of milk in interstate commerce was being impeded, and indicated that a solution must be found. The committee stated that it was not yet prepared to recommend Federal inspection, but it endorsed a second solution, namely, for the Public Health Service to increase its efforts to develop a cooperative program with the States for the certification of interstate milk shippers.

The Public Health Service concurs heartily with these recent recommendations of the Supreme Court and the Senate Committee. We hope that health agencies everywhere will resist local groups who promote the practice of adopting health regulations in order to set up trade barriers. It is also hoped that the Supreme Court decision will be a deterrent to the future incorporation of trade barriers in local

milk legislation, and that such obstacles to the free movement of milk will be removed.

An Interstate Certification System

Throughout the past 10 years, State and local health authorities, agricultural officials, and the dairy industry have intensified their demands for a plan for certification of interstate milk shipments on which importing areas may rely with confidence. The Food and Drug Administration and the Department of the Army have endorsed the idea. The Association of State and Territorial Health Officers, the American Public Health Association, and the Conference of State Sanitary Engineers have formally requested the Public Health Service to develop such a plan, in cooperation with the States. These groups have expressed the opinion that, since the problem is an interstate one, some degree of coordination and assistance by the Public Health Service is required.

Since 1946, the Public Health Service has been receiving more and more requests to make inspections of interstate milk supplies. For example, in 1949, State and local milk control agencies requested the Public Health Service to inspect the supplies of more than 170 individual shippers drawing milk from more than 40,000 dairy farms. The Service, with a very limited budget for all its milk and food sanitation activities, was not in a position to honor all these requests, nor did we feel that it was our place to do so. These requests emphasize the need for a system of certification based on adequate sanitary control and inspection by the State in which the milk is produced.

Conferences on Interstate Shipments

Early in 1950, representatives of 11 Midwestern State health departments met in Chicago to determine what action could be taken to establish such a program on a nation-wide basis. Subsequently, two National Conferences on Interstate Milk Shipments were held in St. Louis. Representatives of agriculture departments and health departments from 26 States attended, as well as representatives of the dairy industry and the Public Health Service. A third conference is scheduled for June 10-12 in St. Louis.

The plan and procedures as developed by these conferences incorporate the views of the majority of the receiving and shipping States.

The elements of the program in which the participation of the Public Health Service is specifically requested may be summarized as follows:

1. Ratings of the milk sheds of interstate shippers are to be made periodically by the State of origin in accordance with the uniform milk sanitation rating procedures developed by the Public Health Service. The results of such ratings are to be reported to the Public Health Service for certification.

2. Frequent spot check surveys are to be made by Public Health Service milk specialists of the inspection, laboratory, and rating procedures of each State participating in the program. Such spot checks are necessary to protect receiving areas against laxness on the part of milk sanitation authorities in shipping areas.

3. Lists of interstate shippers, as rated by the shipping States, are to be published and widely distributed semiannually by the Public Health Service. Between publication dates, State ratings as reported to and certified by the Public Health Service are to be forwarded to receiving areas as supplements to the published list.

4. The Public Health Service is to assist the States, when requested, to develop and improve their milk control programs, standardize procedures, and train State, municipal, and industrial inspectors and laboratory personnel.

5. The Milk Ordinance and Code Recommended by the Public Health Service is to be used as the basic standard for evaluating or rating interstate milk supplies. As stated earlier, this ordinance has been incorporated in the milk sanitation regulations of 32 States and 2 Territories.

Some States have already initiated the program on a limited basis. Ratings submitted by these States have been published by the Public

Health Service, and include the names and ratings of 182 shippers located in 17 States and the District of Columbia.

The agreements reached and the decisions made by the States themselves at the two National Conferences on Interstate Milk Shipments represent, in our opinion, the most progressive step taken to date toward solution of the health problems involved in interstate milk shipments. The Public Health Service endorses the national program proposed by these conferences, and, within the limits of our budget, we propose to assume the responsibilities which its full implementation would place upon us. Obviously we cannot take on all of these duties immediately without increasing our staff.

Need for Industry Participation

If it is to accomplish its purpose, the proposed national program for interstate milk shipments must have the endorsement of all regulatory agencies, and of the producers, processors, and distributors of milk and milk products. It needs the support of this Institute and the members of this audience. It needs your active, voluntary participation. We believe that such participation is to your advantage, and is certainly within the pattern of conscientious, public-spirited service which has always marked the operations of the dairy industry.

Many unforeseen problems will arise which will have to be worked out on the basis of experience. You can help work them out, help modify the system when and as it needs modification, and you can give health and agriculture authorities the benefit of your organized experience and advice. The proposed program presents another opportunity for the dairy industry and health agencies to extend their close working relationship in their common purpose of furnishing a high quality milk supply for the improvement of public health.